

WHAT IS CLAIMED IS:

1 1. An item, comprising:
2 an item surface; and
3 a plurality of machine-readable item codes printed on the item surface, at least
4 one of the item codes being associated with the item and being substantially invisible to a
5 human.

1 2. The item of claim 1, wherein each of the item codes are associated with the
2 item and are substantially invisible to a human.

1 3. The item of claim 1, wherein at least two of the item codes contain the same
2 information.

1 4. The item of claim 1, wherein at least two of the item codes contain different
2 information.

1 5. The item of claim 4, wherein the different information is adapted to be
2 combined via at least one of: (i) a sequence number in each item code; (ii) at least one
3 item code describing an order in which at least one other item code should be combined,
4 and (iii) a position of the item codes on the item surface.

1 6. The item of claim 4, wherein at least one item code contains meta-data
2 associated with at least one other item code.

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1 7. The method of claim 4, wherein the at least two of the item codes containing
2 different information are printed on the item surface via different techniques to render the
3 item codes substantially invisible to a human.

1 8. The item of claim 1, wherein at least one item code comprises: (i) a bar code,
2 (ii) a two-dimensional code, and (iii) a watermark.

1 9. The item of claim 1, wherein at least one item code indicates at least one of: (i)
2 an item identifier, (ii) a manufacturer identifier, (iii) a distributor identifier, (iv) a delivery
3 service identifier, (v) a purchaser identifier, (vi) an owner identifier, (vii) a user identifier,
4 and (viii) a merchant identifier.

1 10. The item of claim 1, wherein at least one item code is adapted for use with at
2 least one of: (i) a point of sale system, (ii) an inventory system, (iii) a delivery service
3 system, (iv) an identification system, (v) a warehousing system, (vi) a smart shopping
4 cart system, (vii) a production system, and (viii) an assembly system.

1 11. The item of claim 1, wherein at least one item code is formed using at least
2 one of: (i) a chemical, (ii) an invisible ink, (iii) an ink that becomes visible in ultra-violet
3 light, and (iv) an ink detectable with radiation outside of the visible spectrum.

1 12. The item of claim 1, wherein the item comprises at least one of: (i) a product,
2 (ii) an identification card, (iii) a negotiable instrument, (iv) a container, (v) a package,
3 (vi) an envelope, (vii) an event ticket, and (viii) a document.

1 13. The item of claim 1, wherein the item surface comprises at least one of: (i) a
2 product surface, (ii) a product label, (iii) a product tag, (iv) a picture, (v) an image, (vi) a

3 container surface, (vii) a package surface, (viii) a container label, (ix) a package label, (x)
4 a container tag, and (xi) a package tag.

1 14. The item of claim 1, wherein the item has two distinct item surface areas, and
2 at least one item code is printed each distinct item surface area.

1 15. The item of claim 1, wherein visible information is displayed on the same
2 area of the item surface as at least one item code.

1 16. An identification card associated with a card-holder, comprising:
2 an identification card surface; and
3 a machine-readable code printed on the identification card surface, the code being
4 associated with the card-holder and being substantially invisible to a human.

1 17. The identification card of claim 16, wherein the code indicates at least one of:
2 (i) a card-holder identifier, (ii) a benefit, and (iii) an expiration date.

1 18. The identification card of claim 16, wherein visible information is displayed
2 on the same area of the identification card as the code.

1 19. The identification card of claim 15, wherein a plurality of codes are printed
2 on the identification card surface, each of the codes being associated with the card-holder
3 and being substantially invisible to a human.

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9 processing the item, (viii) marketing information, (ix) provenance information, (x)
10 information associated with a sale of the item, (xi) information associated with future
11 disposition of the item, (xii) information associated with disposal of the item, (xiii)
12 information associated with reclaiming at least a portion of the item, and (xiv)
13 information associated with recycling at least a portion of the item.

1 24. The item of claim 23, wherein a plurality of item codes are printed on the
2 item surface.

1 25. A method of marking an item having an item surface, comprising:
2 determining an item code associated with the item; and
3 printing a plurality of machine-readable item codes on the item surface, at least
4 one of the item codes being associated with the item and being substantially invisible to a
5 human.

1 26. An apparatus for marking an item, comprising:
2 a printing controller; and
3 a printing device in communication with the printing controller and adapted to
4 print a plurality of machine-readable item codes on the item surface, at least one of the
5 item codes being associated with the item and being substantially invisible to a human.

1 27. An apparatus for determining information associated with an item,
2 comprising:
3 a detection controller; and
4 a detecting device in communication with the detection controller and adapted to
5 read at least one of a plurality of machine-readable item codes on the item surface, at

- 6 least one of the item codes being associated with the item and being substantially
7 invisible to a human.

- 1 28. The method of claim 27, wherein the detection controller is associated with at
2 least one of: (i) a point of sale system, (ii) an inventory system, (iii) a delivery service
3 system, (iv) an identification system, (v) a warehousing system, (vi) a smart shopping
4 cart system, (vii) a production system, and (viii) an assembly system.

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